WHA IS CLAIMED IS:

1. An apparatus for the section-wise autofrettage of a barrel, especially a gun barrel, by a hydraulic internal pressure generated inside the barrel, said apparatus comprising:

a mandrel-shaped insert that can be inserted into the barrel from a barrel opening end and has connected a first sealing device, for a caliber region of the barrel connected to one end thereof;

the first sealing device has a seal packet, which is disposed on a seat seal formed on the insert, with the seat seal being limited at the front by a holding device, comprising a threaded sleeve that is screwed onto the insert, and an annular intermediate part, that adjoins the threaded sleeve at the rear and engages the seal packet;

the seal packet includes at least one O-ring, which is held by a shoulder of the insert adjacent the seal seat, a leather ring, a bearing ring, and a high-pressure seal formed from two partial rings, with the partial rings being connected to one another by a conical contact surface such that, when pressure is exerted onto the high-pressure seal, one of the two partial rings is pressed outward against an inside wall of the

gun barrel along the contact surface, and the other of the two partial rings is pressed inward against the metal insert along the conical contact surface.

- 2. The apparatus according to claim 1, wherein the O-ring of the seal packet is elastic, and is held by the shoulder of the insert, and the leather ring is supported against the O-ring and against the bearing ring.
- 3. The apparatus according to claim 1, further including a stud is inserted into the threaded sleeve of the holding device on an end opposite the seal packet, with the thread of the threaded sleeve in the region engaged by the stud running in the direction opposite to a remainder of the thread of the sleeve so that the threaded sleeve can be rotated away from the seal packet through rotation of the stud.
- 4. The apparatus according to claim 1, wherein the O-ring comprises rubber.
- 5. The apparatus according to claim 1, wherein the two partial rings of the high-pressure seal comprise steel.

- 6. The apparatus according to claim 1, wherein the leather ring comprises cowhide leather.
- 7. The apparatus according to claim 1, further comprising a second sealing device for a breech region of the barrel connected to the opposite end of the mandrel-shaped insert, with the second sealing device essentially corresponding in design to the first sealing device.
- 8. The apparatus according to claim 1, wherein the mandrel-shaped insert is provided with annular, spaced depressions on its circumferential surface with the depressions extending from the cicrumferential surface, into an interior of the insert.